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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,727	08/09/2002	Colin Robert Willis	41577/266144	5079

7590 12/06/2006

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EXAMINER
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PADGETT, MARIANNE L

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 12/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/018,727

Applicant(s)

WILLIS ET AL.

Examiner

Marianne L. Padgett

Art Unit

1762

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 28 November 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-4, 7, 12 and 21.  
Claim(s) withdrawn from consideration: 8 and 13-20.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

  
**MARIANNE PADGETT  
PRIMARY EXAMINER**

## Continuation of 3. NOTE:

Applicant has proposed amending the independent claim to narrow the range of average power densities employed in the pulsed plasma from "less than 0.05 W/cm<sup>2</sup>" to the new range of "less than 0.0025 W/cm<sup>2</sup>", which creates new issues, particularly concerning the significance of this parameter range with respect to the pulsed plasma deposition process in relation to this specifically claim compounds & when also combined with the pulsing times of claims 7.

## Continuation of 11. does NOT place the application in condition for allowance because:

Applicants' arguments that allege that plasma pulsing on free radical initiated polymerizations are not well understood, are not well supported considering the Timmons et al. reference shows that general trends are understood with respect to retention of reactive groups in analogous compounds, including that lower power densities are expected to be advantageous in retention of reactive functional groups, thus providing teachings to one of ordinary skill in the art, which they would have been expected to employ to use routine experimentation to optimize such parameters in order to effect such functional group of retention. Applicants have pointed out no evidence in their specification that provides experimental evidence of unexpected results for the proposed narrower average power density range in relation to any other pulsed power scratch that plasma power parameters in general or specific (the comparison is with continuous, which the prior art also compares), as the cited support on page 6, line 12 merely provides a teaching that it is "most preferably", while the figures 1-9 of examples, which start on page 9 provide only pulsed on and off times + the power, from which the examiner has no means to calculate power density, nor would these examples, which all use the same pulse parameters, provide information that show an unobvious or significantly different result from employing one set of pulsed plasma parameters over another to provide unobvious significance to the claimed range.

Furthermore, the examiner notes that applicant makes arguments concerning "that a very short, low power pulse initiates such monomers and that growth of the polymer occurs during a relatively long off period... is beneficial for deposition of polymers, which rely substantially on free radical initiated polymerization", however review of the claim language shows that there is no requirement that any polymers are ever deposited, since only the preamble has any wording concerning any deposition whatsoever, and it only says "A method for applying a reactive epoxy containing coating to a substrate, said method comprising", which only requires that whatever is deposited from the claimed compounds still contain some reactive epoxy functional groups, i.e. no polymerization ever need occur. This is besides the consideration that applicants have not even positively claimed that any deposition actually occurs due to the pulsed plasma, merely that the method is for such purpose, without actually requiring it to ever happen, let alone that polymerization occurs from the claimed molecules with growth occurring during the plasma off periods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne L. Padgett whose telephone number is (571) 272-1425. The examiner can normally be reached on M-F from about 8:30 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks, can be reached at (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MLP /dictation software  
12/4/2006

